

**What is claimed is:**

1. An apparatus for controlling an electric oven, comprising:

5 a key manipulation unit for manipulation of the electric oven;

a controller for controlling a temperature in a cavity of the electric oven to a set temperature according to a signal of the key manipulation unit; and

10 at least one heater operated at a predetermined heating on/off interval by means of the controller, a heater-on time in the heating on/off interval of the heater being changed at a predetermined period with comparing a current temperature in the cavity with the set temperature.

15 2. The apparatus according to claim 1, wherein a heating-off time in the heating on/off interval is fixed.

20 3. The apparatus according to claim 1, wherein, in case there are a plurality of heaters, as a result of comparison between the current temperature in the cavity and the set temperature, a heater with greater heating capacity is turned on if a temperature difference is greater than a predetermined criterion, while a heater with smaller heating capacity is turned on if the temperature difference is  
25 smaller than a predetermined criterion.

30 4. The apparatus according to claim 1, wherein, in case there are a plurality of heaters, as a result of comparison between a current temperature in the cavity and the set temperature, all heaters are turned off for a predetermined time if the set temperature is lower than the current temperature in the cavity.

35 5. The apparatus according to claim 1, wherein as a result of comparison between a current temperature in the

cavity and the set temperature, the heater-on time of the heater is elongated as the set temperature is higher than the current temperature in the cavity.

5           6.     The apparatus according to claim 1, wherein, as a  
result of comparison between a current temperature in the  
cavity and the set temperature, the heater-on time of the  
heater is elongated longer at each heater-on interval as the  
10       set temperature is higher than the current temperature in the  
cavity.

          7.     The apparatus according to claim 1, wherein, as a  
result of comparison between a current temperature in the  
cavity and the set temperature, the heating on/off interval  
15       is kept as it is if the difference is not more than a  
predetermined criterion.

          8.     The apparatus according to claim 1, wherein the  
set temperature is manually designated by a user.

20           9.     A method for controlling an electric oven,  
comprising:

          comparing a current temperature in the electric oven  
and a set temperature; and

25       heating the electric oven by turning on/off at least  
one heater at a predetermined interval,

          wherein a heater-on time of the heater is elongated  
according to a temperature difference obtained in the  
comparing step.

30           10.    The method according to claim 9, wherein the  
larger number of heaters are turned on as the current  
temperature in the electric oven is lower than the set  
temperature as a result of the comparing step.

35           11.    The method according to claim 9, wherein a heater

with greater heating capacity among a plurality of the heaters is turned on as the current temperature in the electric oven is lower than the set temperature as a result of the comparing step.

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12. The method according to claim 9, wherein, in the heating step, a plurality of the heaters are alternately or simultaneously operated in consideration of electric power.

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13. The method according to claim 9, wherein the heater-on time of the heater is changed at a predetermined period repeatedly.

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14. The method according to claim 9, wherein, in case there are a plurality of heaters, in the heating step, heaters to be operated are selected by the smaller number of combinations than the number of cases of a subset for the number of the heaters.

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15. The method according to claim 9, wherein, as a result of the comparing step, the heater-on time of the heater is elongated as the current temperature is lower than the set temperature.

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16. The method according to claim 9, wherein, as a result of the comparing step, the heater-on time of the heater in the heating on/off interval is elongated as the current temperature is lower than the set temperature.

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17. The method according to claim 9, wherein, as a result of the comparing step, all heaters are turned off for a predetermined time if the current temperature is higher than the set temperature.

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18. The method according to claim 9, wherein, as a result of the comparing step, the heating on/off interval of

the heater is not changed if difference between the current temperature and the set temperature is not more than a predetermined criterion.

5           19.    An apparatus for controlling an electric oven, comprising:

          a key manipulation unit for manipulation of the electric oven;

          at least one heater formed in the electric oven; and

10           a controller for operating the heater according to a signal of the key manipulation unit so that the heater is turned on/off at a predetermined interval, and changing a heater-on time of the heater in the heating on/off interval according to a difference between a current time in the  
15           electric oven and a set temperature.

          20.    The apparatus according to claim 19, wherein the set temperature and the current temperature are compared, and the heating on time is elongated longer as the set  
20           temperature is higher than the current temperature.